

The behavior of the reindeer herd - the role of the males

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Traditional knowledge
Herd structure
Castration
Activity

Herd structure

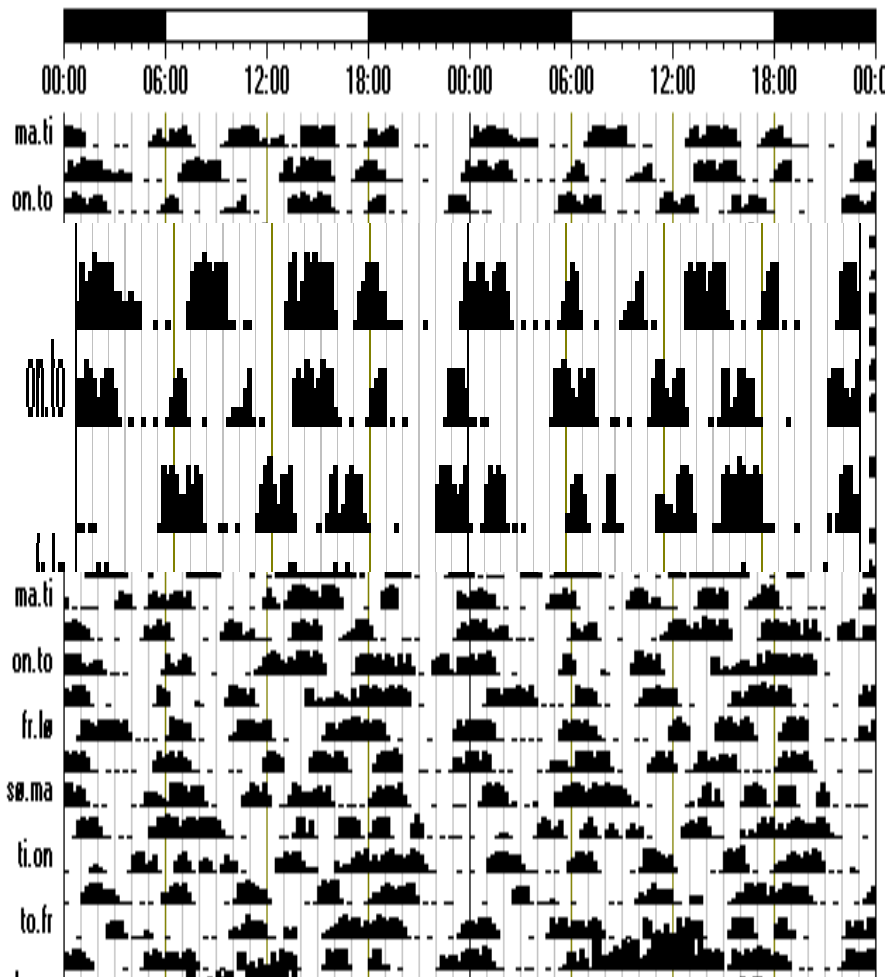


- **Male / female ratio**
- **Behavior types**
- **Individual behavior vs. herd behavior**
- **Castrates**

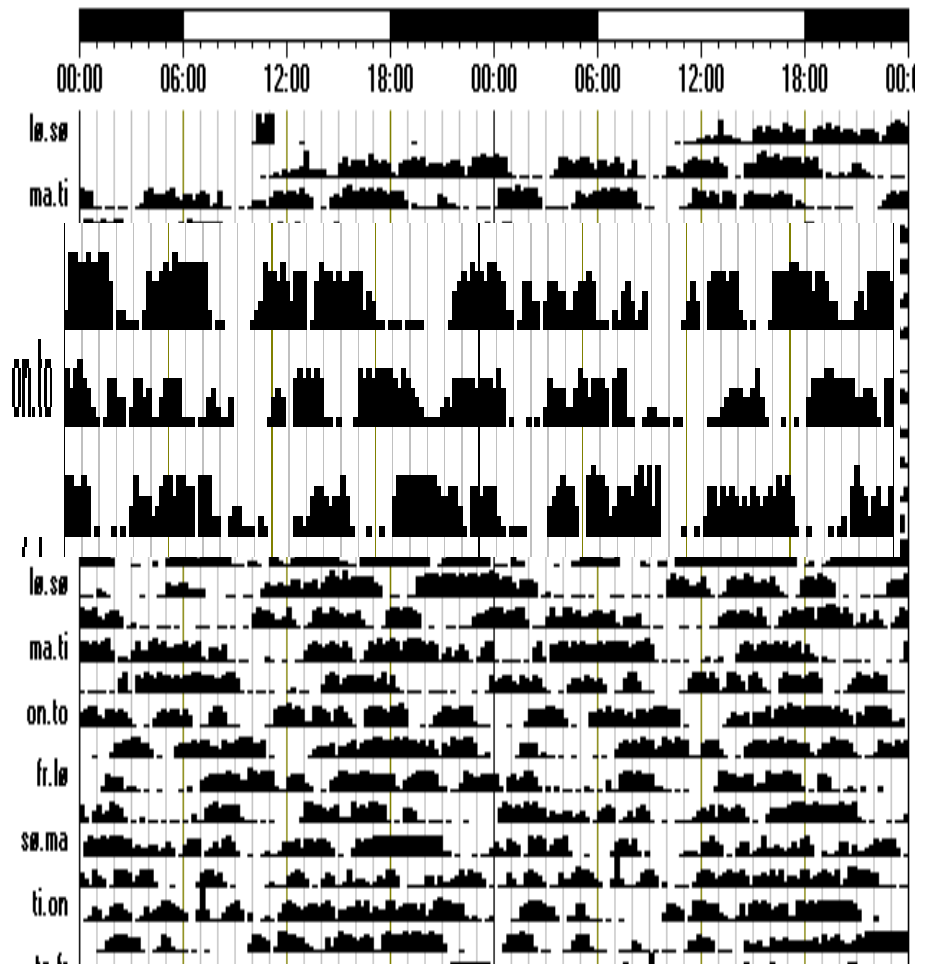
Activity logging

- **Activity as an indicator for behavior**
- **Logging movement**
 - **Activity**
 - **Inactivity**

Data from activity loggers



Castrated male (heargi)



Female

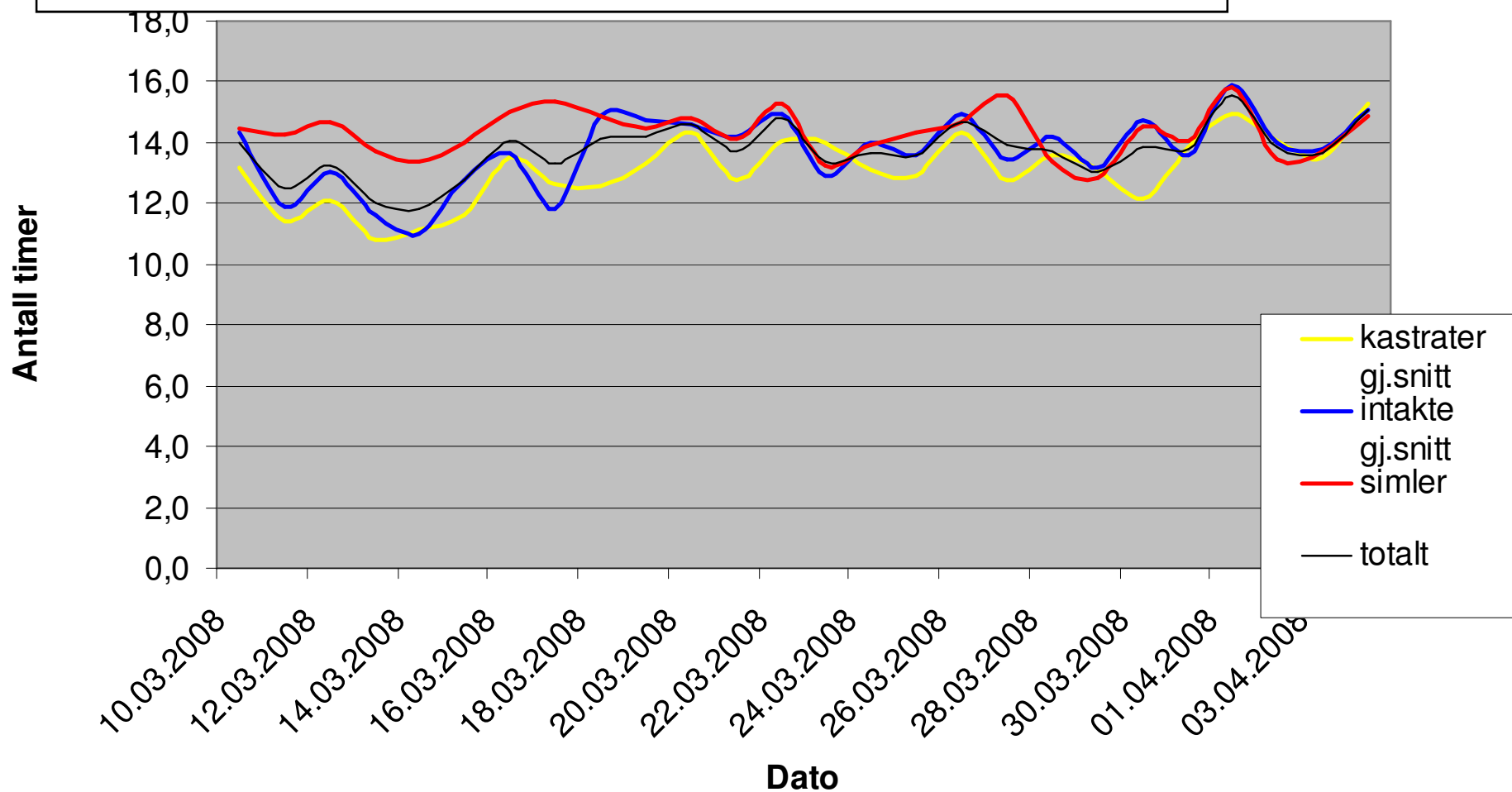
"active" hours pr day

Average active hours in the period, total number of hours 624.

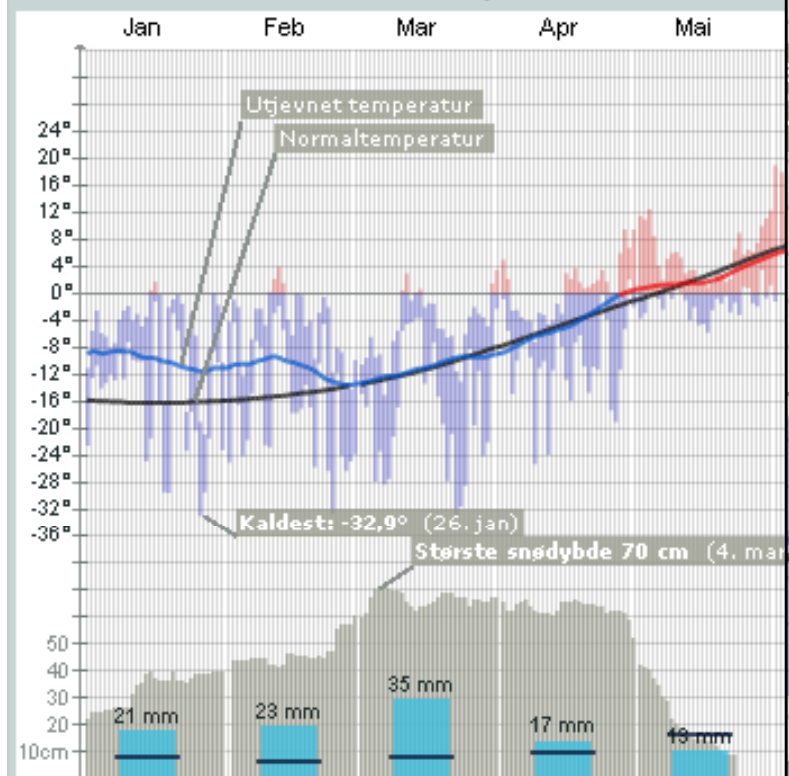
Females: 373 hours

Intact males: 357 hours

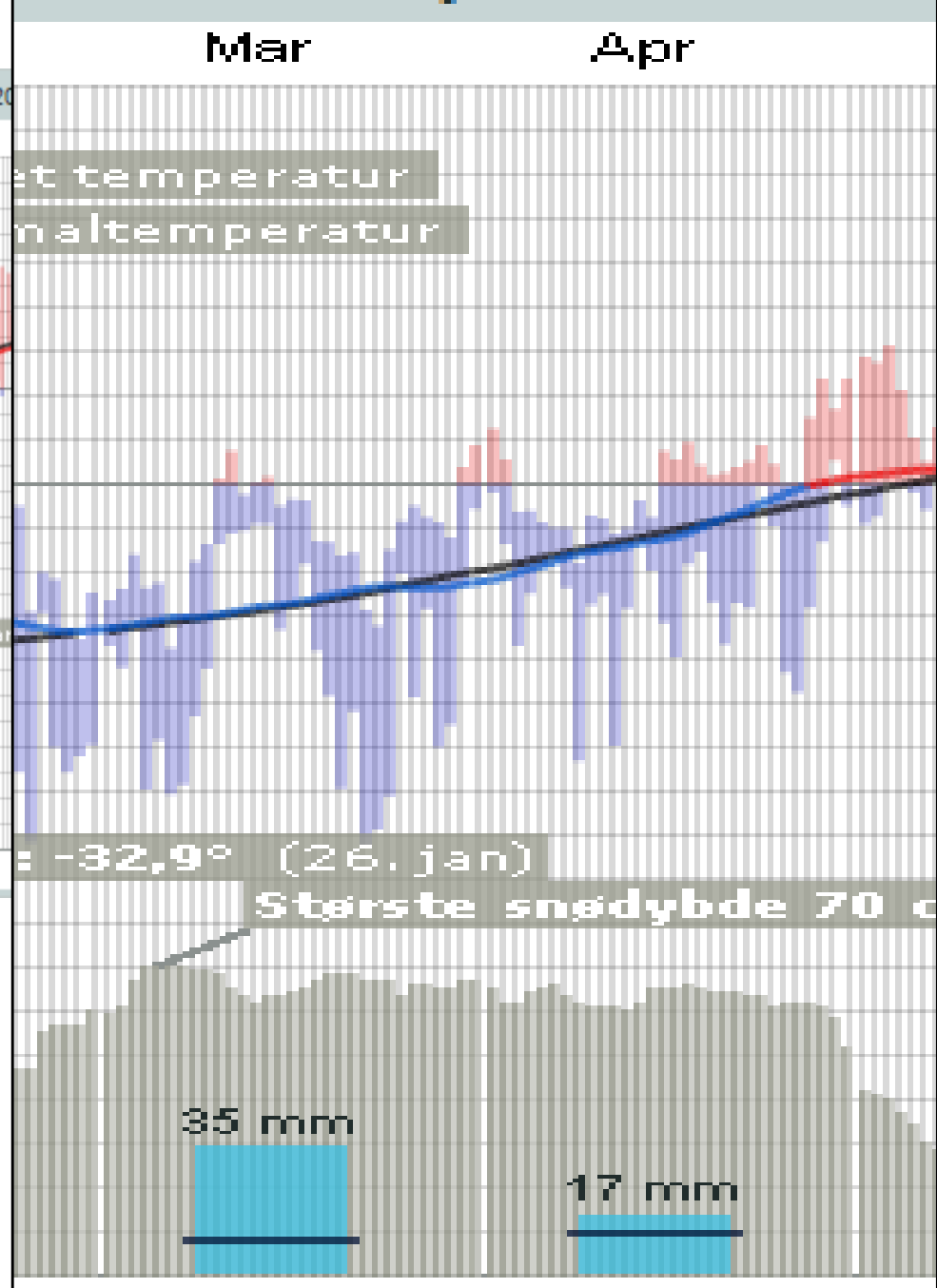
Castrated males: 341 hours



Værstatistikk for Kautokeino januar 2008 – desember 2008

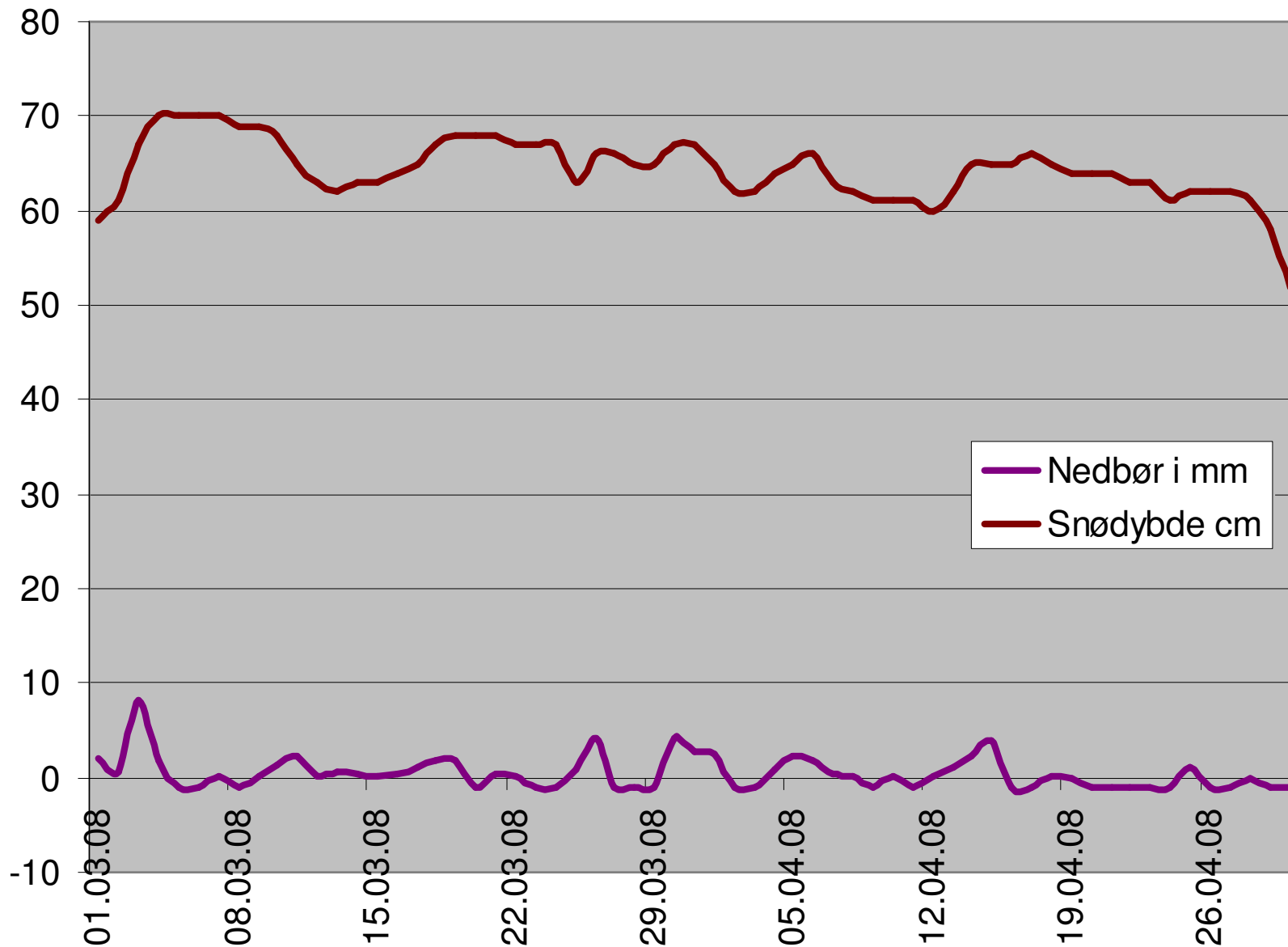


Kautokeino januar 2008 – desember 2008

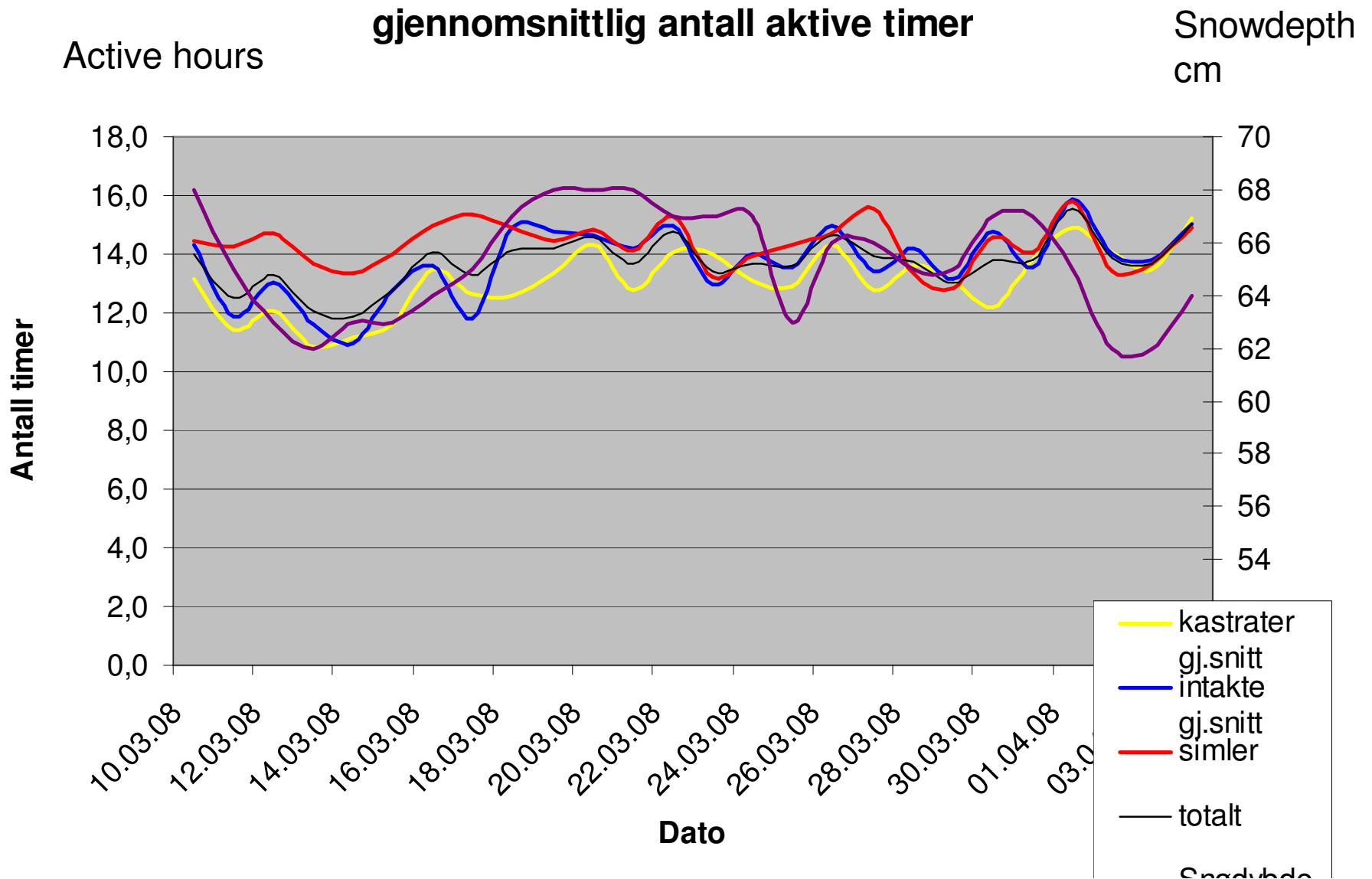


Kilde: www.yr.no

Snowdepth and precipitation



Activity and snowdepth



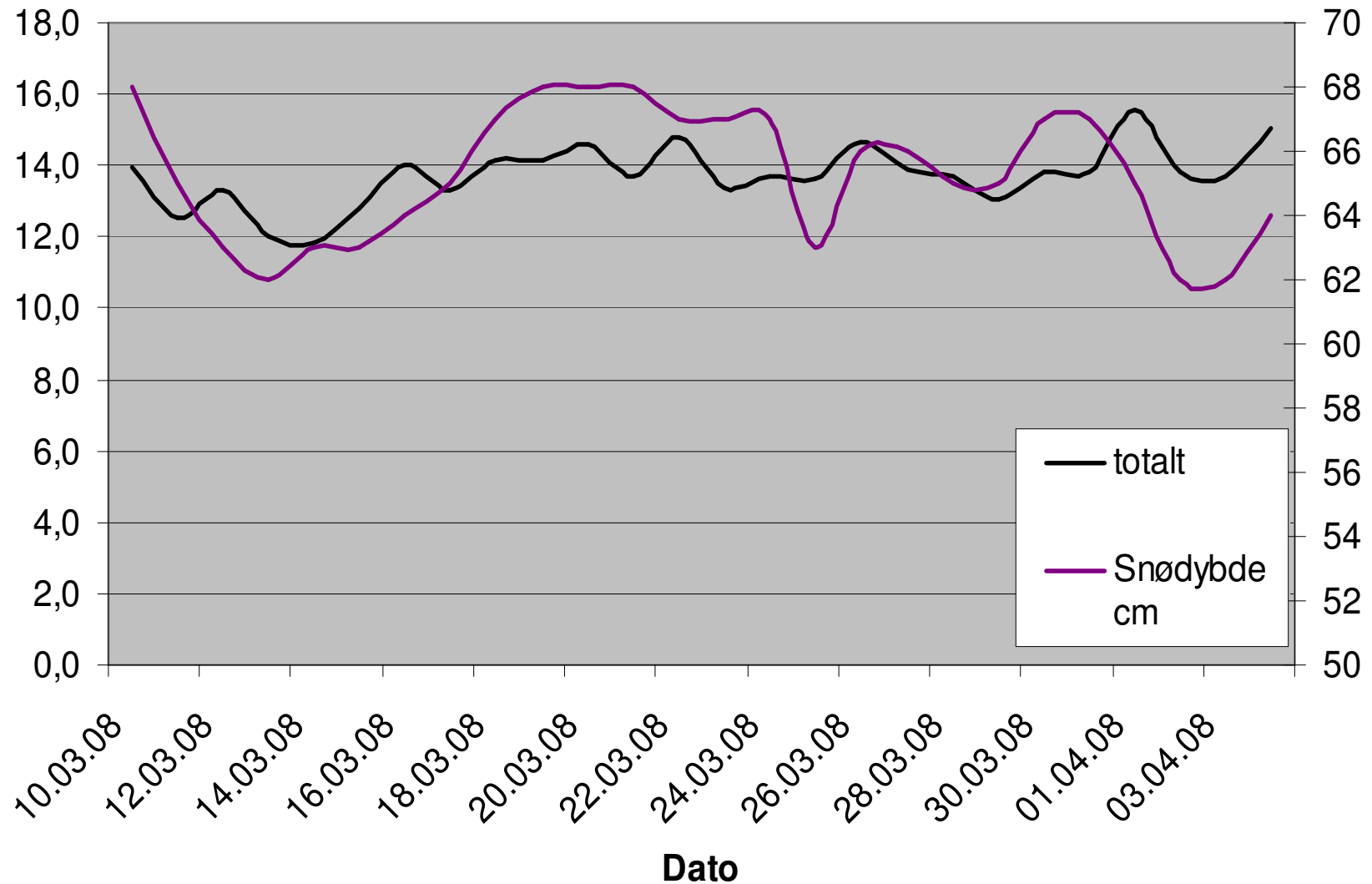
Activity and snowdepth

Active hours

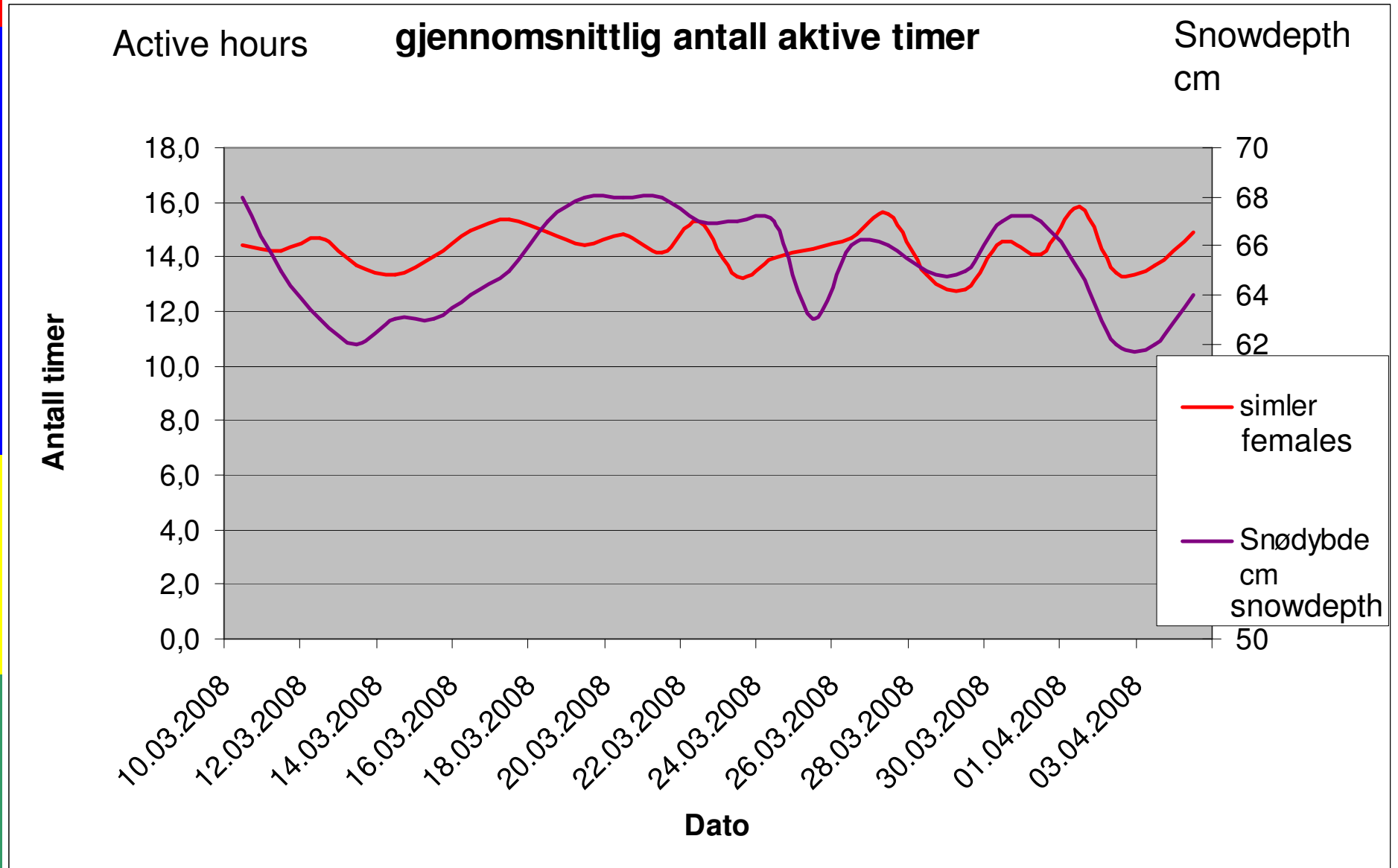
gjennomsnittlig antall aktive timer

Snowdepth
cm

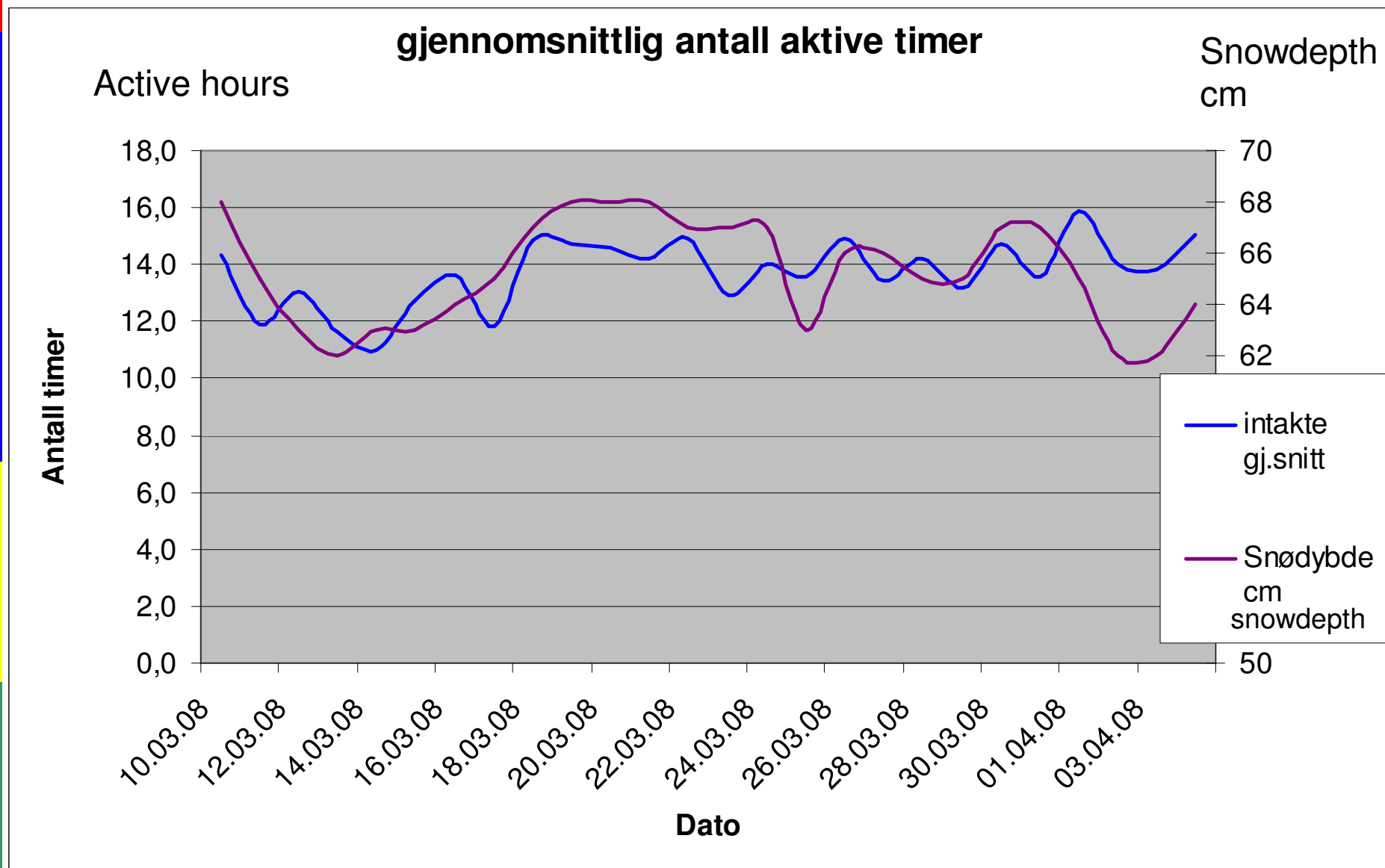
Antall timer



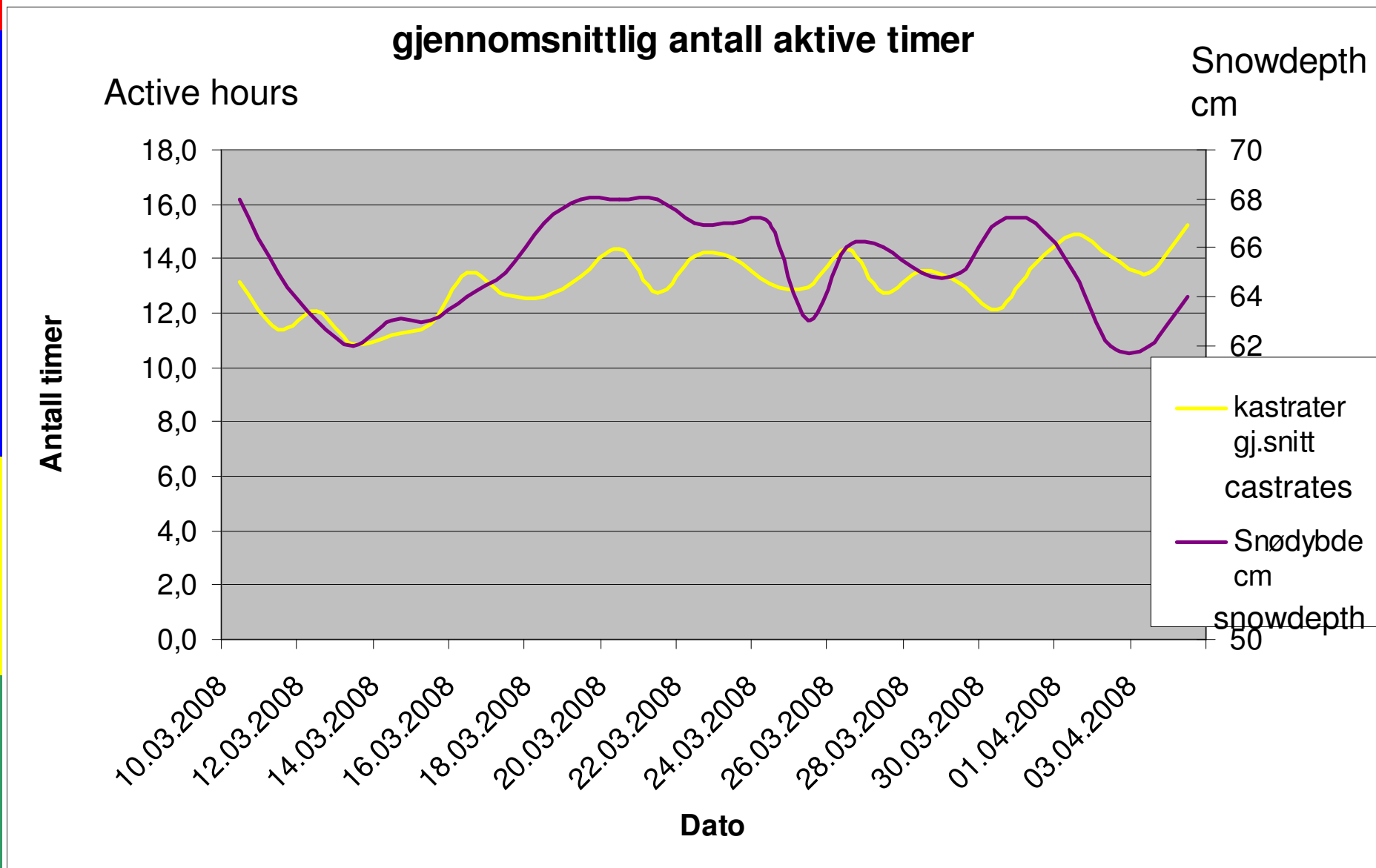
Females



Intact males (sarvvesnulpput)



Castrated males





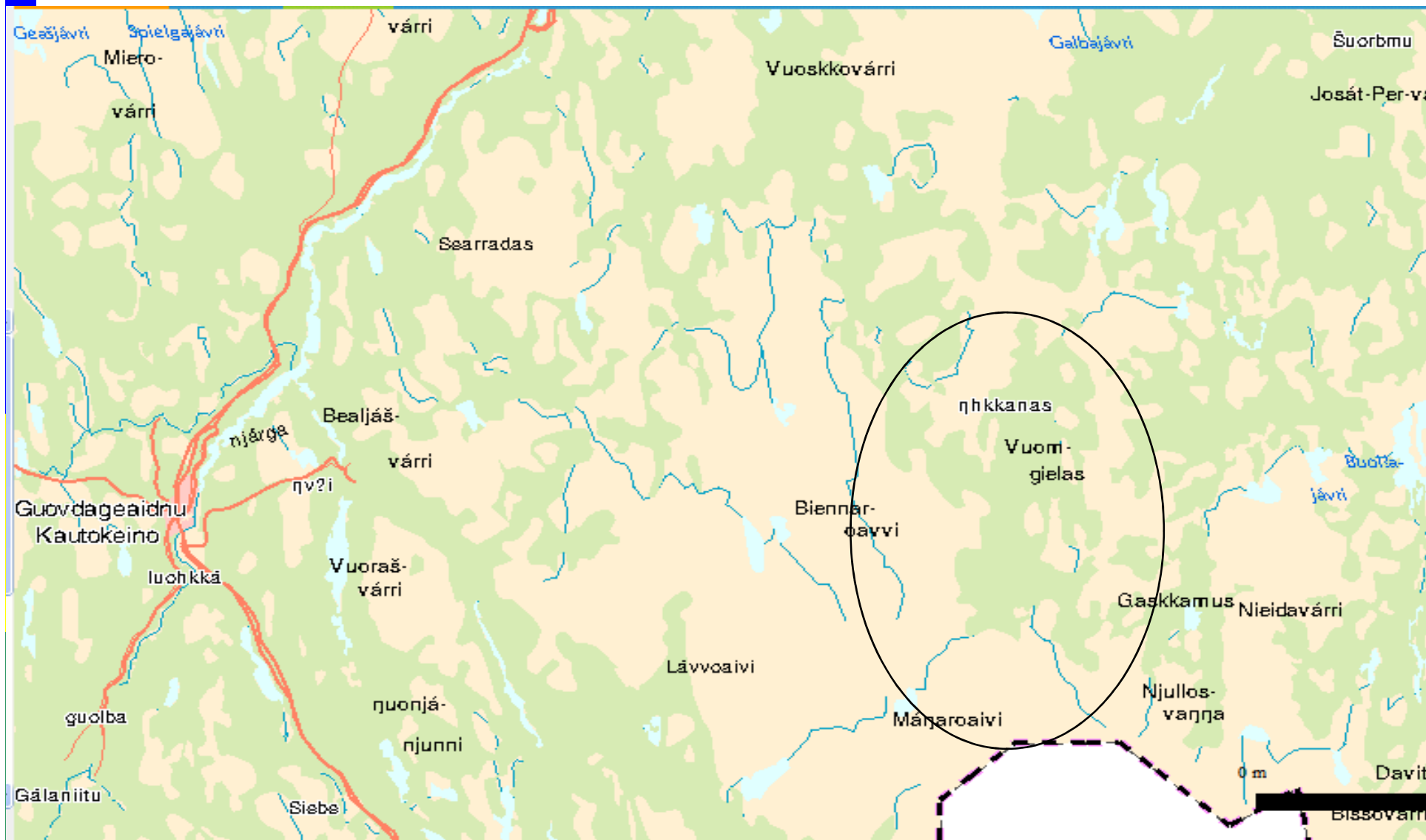
Thank You



Next steps

- Statistical analysis of the data
 - Can this be used to discuss differences in behavior between males and females
 - Does castration of males affect behavior
- Interviews reindeer herders
 - How to define activity
 - Differences in behavior between castrated males and not castrated males

Area





- *” Without castrates it is not possible to build up a controllable reindeer herd. Castrates have many functions in a reindeer herd. The first one is that they are the calmest animals of a herd. Which means that a reindeer herd with castrates quiets down easily. This is one function. In Chukotka it is impossible to survive without crushing ice during a so-called black ice period, when everything gets covered with a layer of ice. When this happens only the castrates are strong enough to break such ice. Reproductive bulls are first to die because of lack of food. Calves die very quickly too. But castrates are the strongest animals and they manage to break such ice. Reindeer cows follow after them and eat the fodder left over” (www.reindeerportal.org)*



Castration

- Energy conservation
- Castrated males are used for transport
- Are able to dig snow when it is bad conditions during winter
- Calm animals, keeps the herd calm
- Individual treatment affects the herds welfare positively

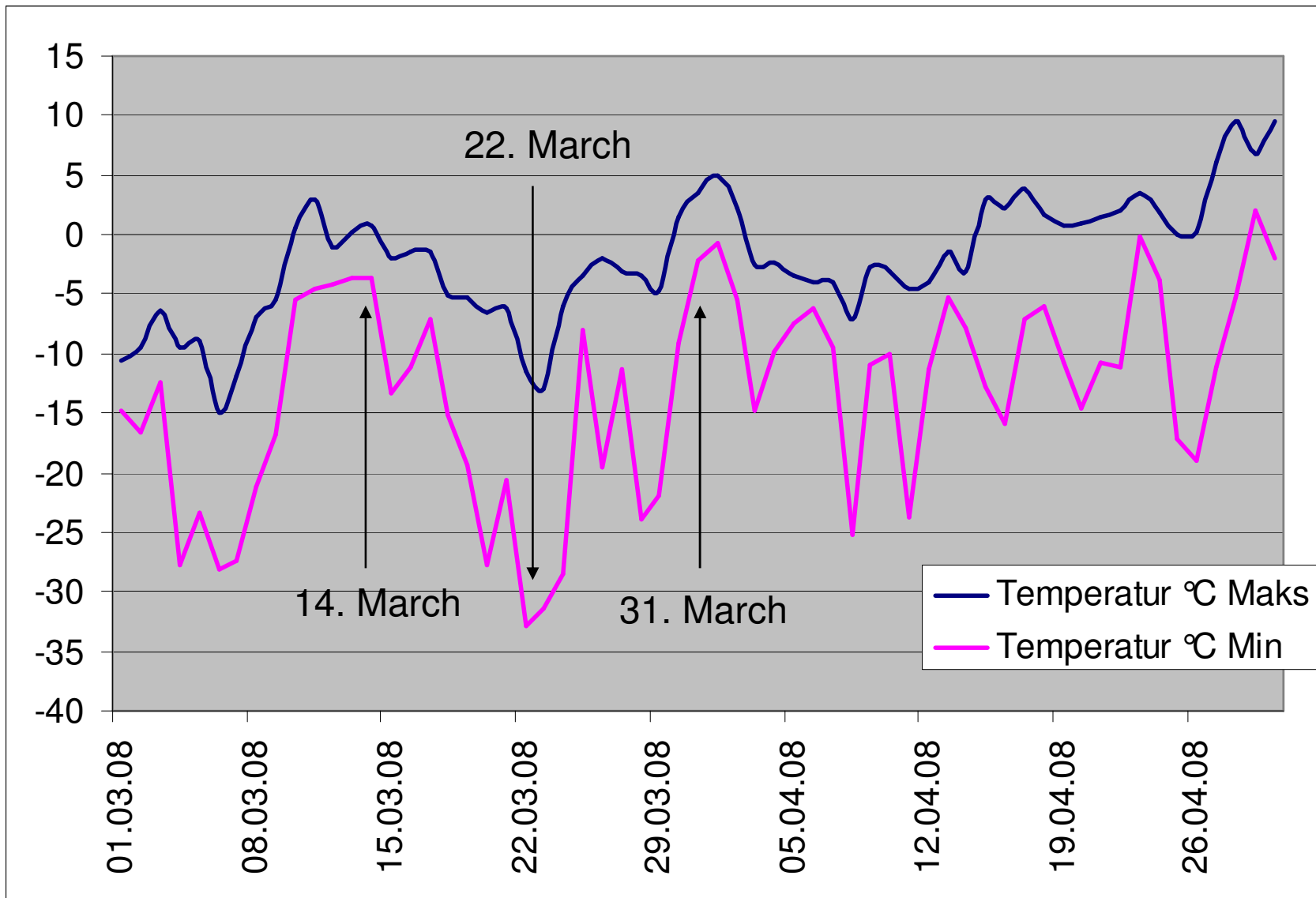




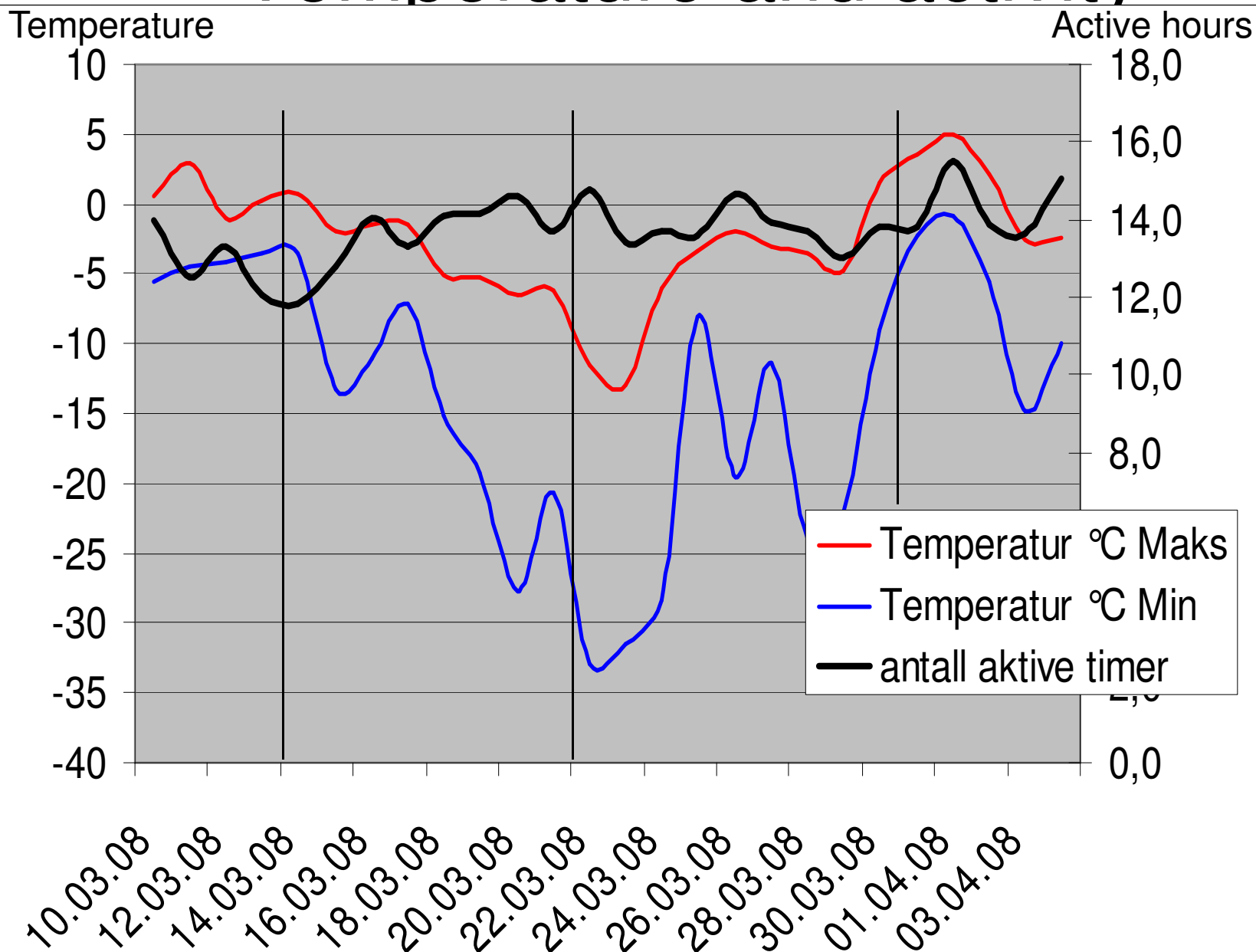
Methods

- Activity logging
 - Activity as an indicator for behavior
 - Logging movement
 - Dekoding the data into two categories of behavior
 - Activity
 - Inactivity

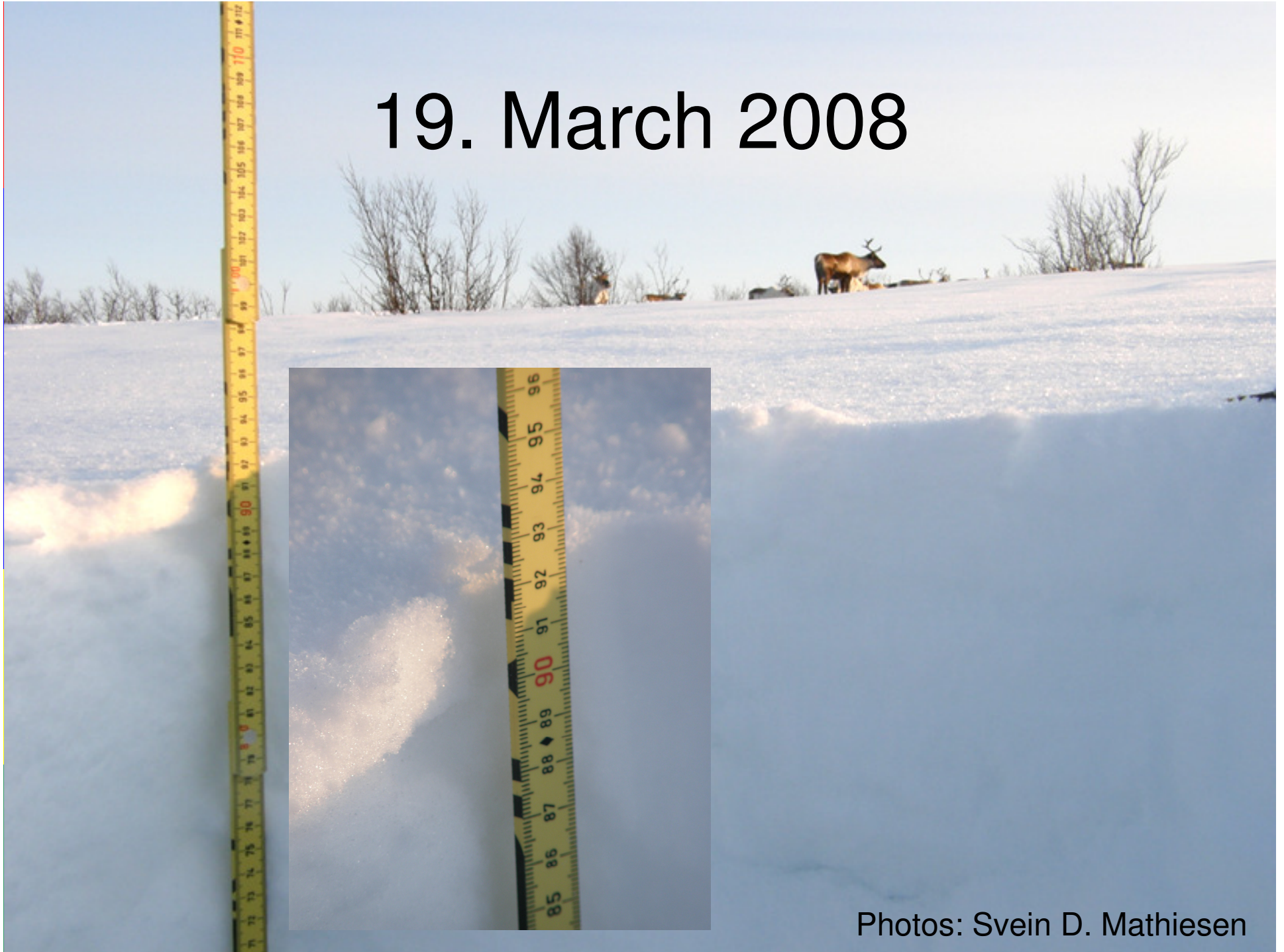
Temperatures



Temperature and activity



19. March 2008



Photos: Svein D. Mathiesen

22. March 2008

Mean temperatur: -24,5°C

Coldest: -32,9°C

Snowdepth: 67 cm

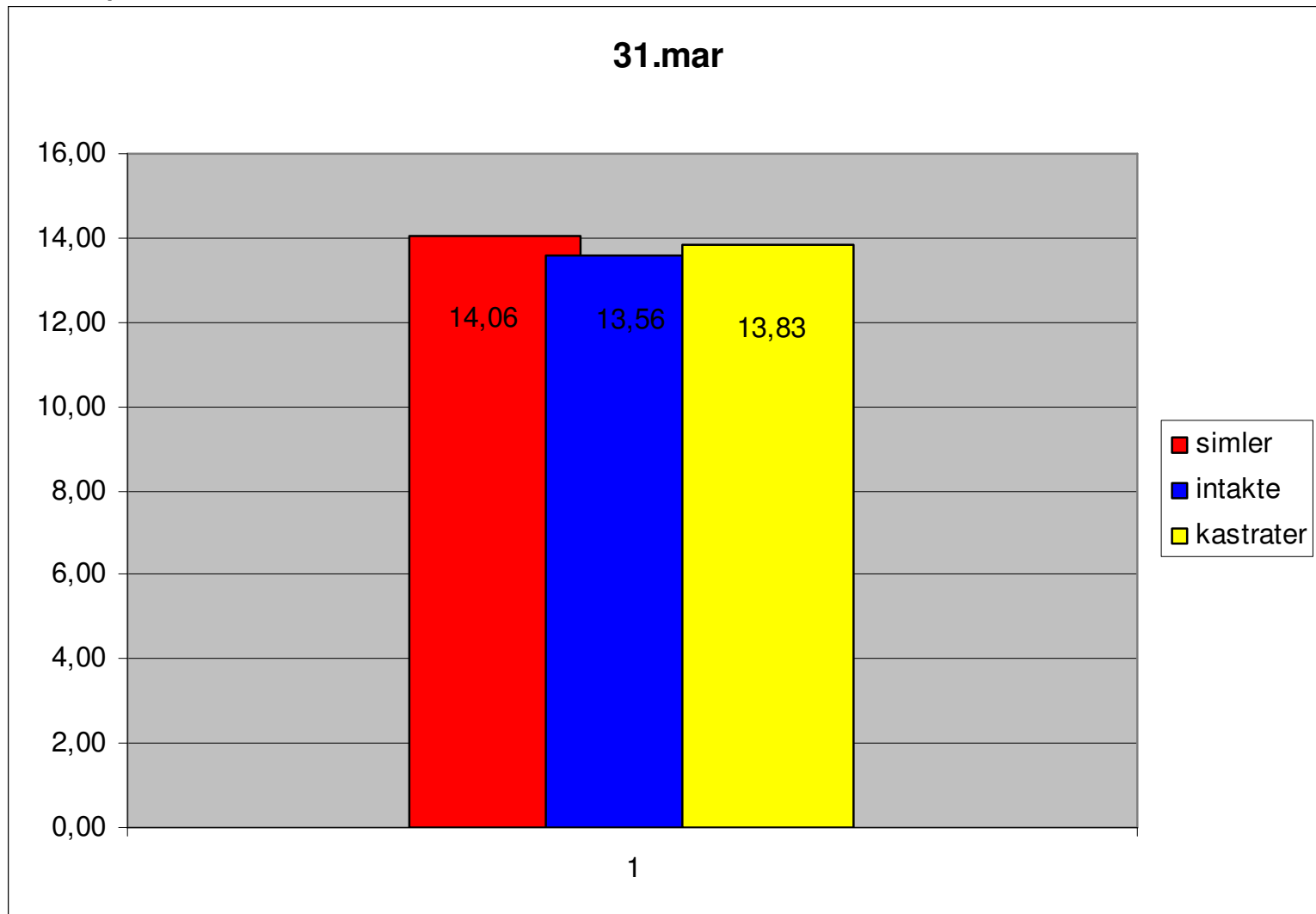


31. Mars

Mean temperature: 0,6°C

Coldest: -2,2°C

Snowdepth: 67 cm.

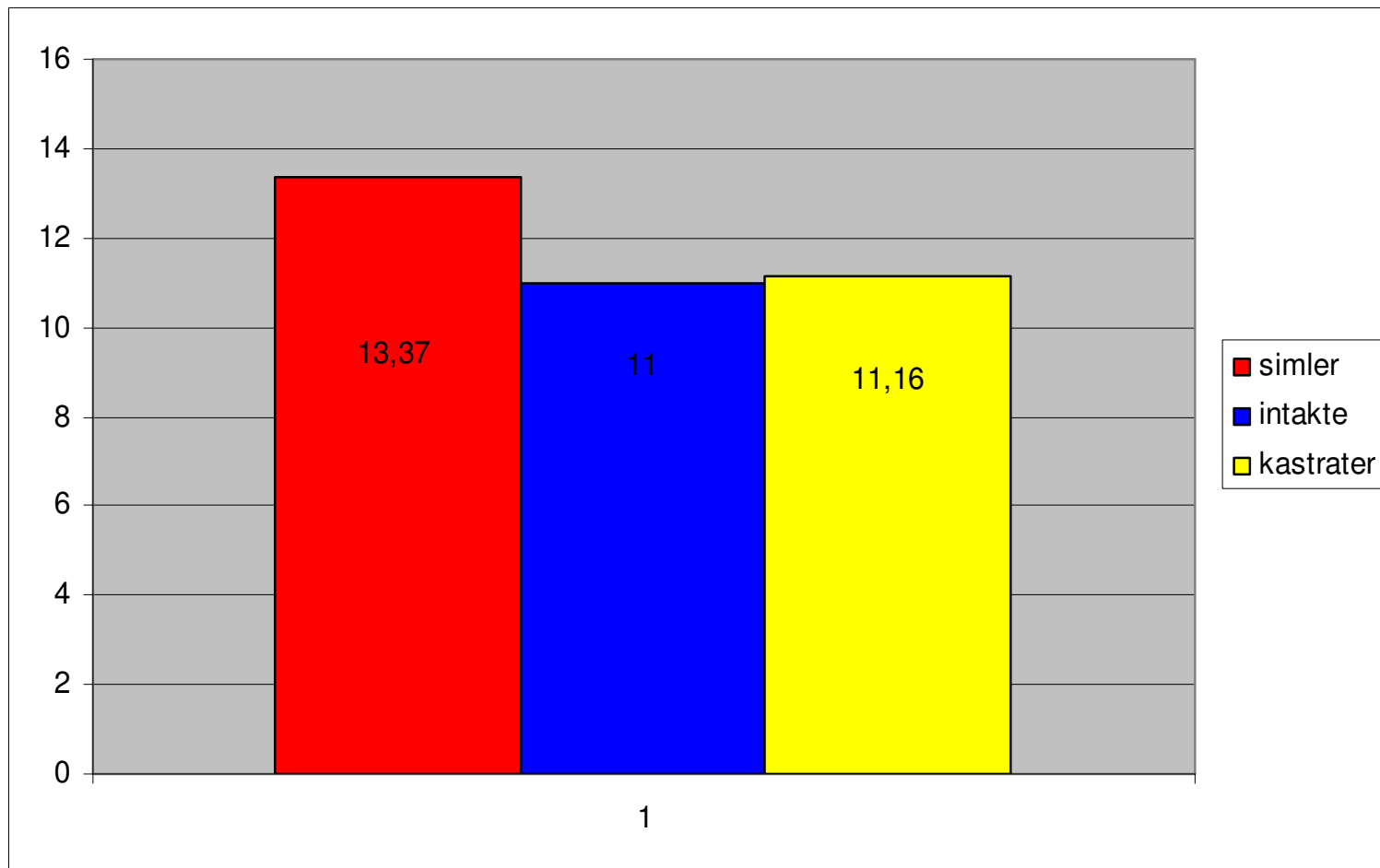


14. Mars

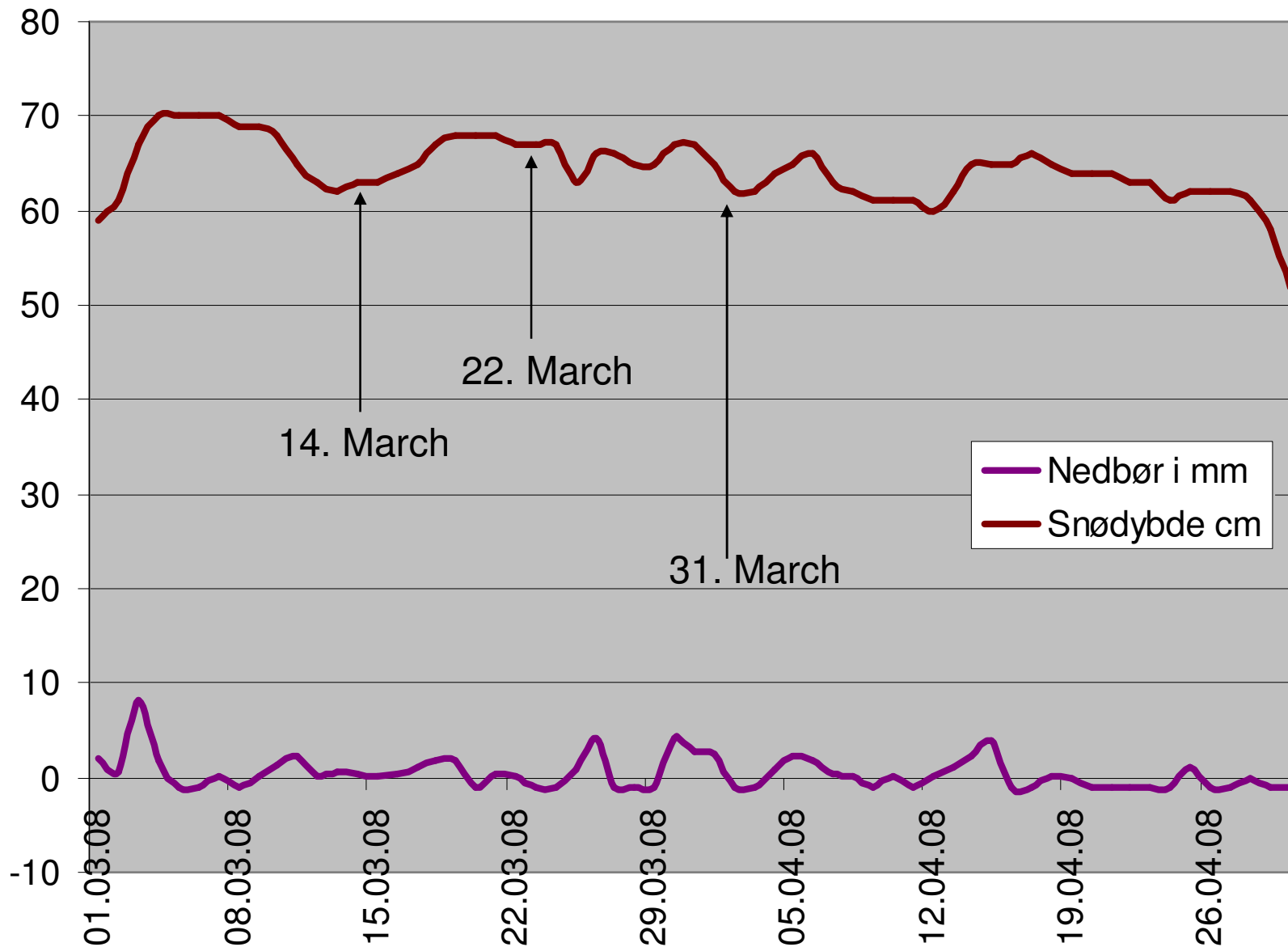
Mean temperature: $-2,9^{\circ}\text{C}$

Coldest: $-3,6^{\circ}\text{C}$

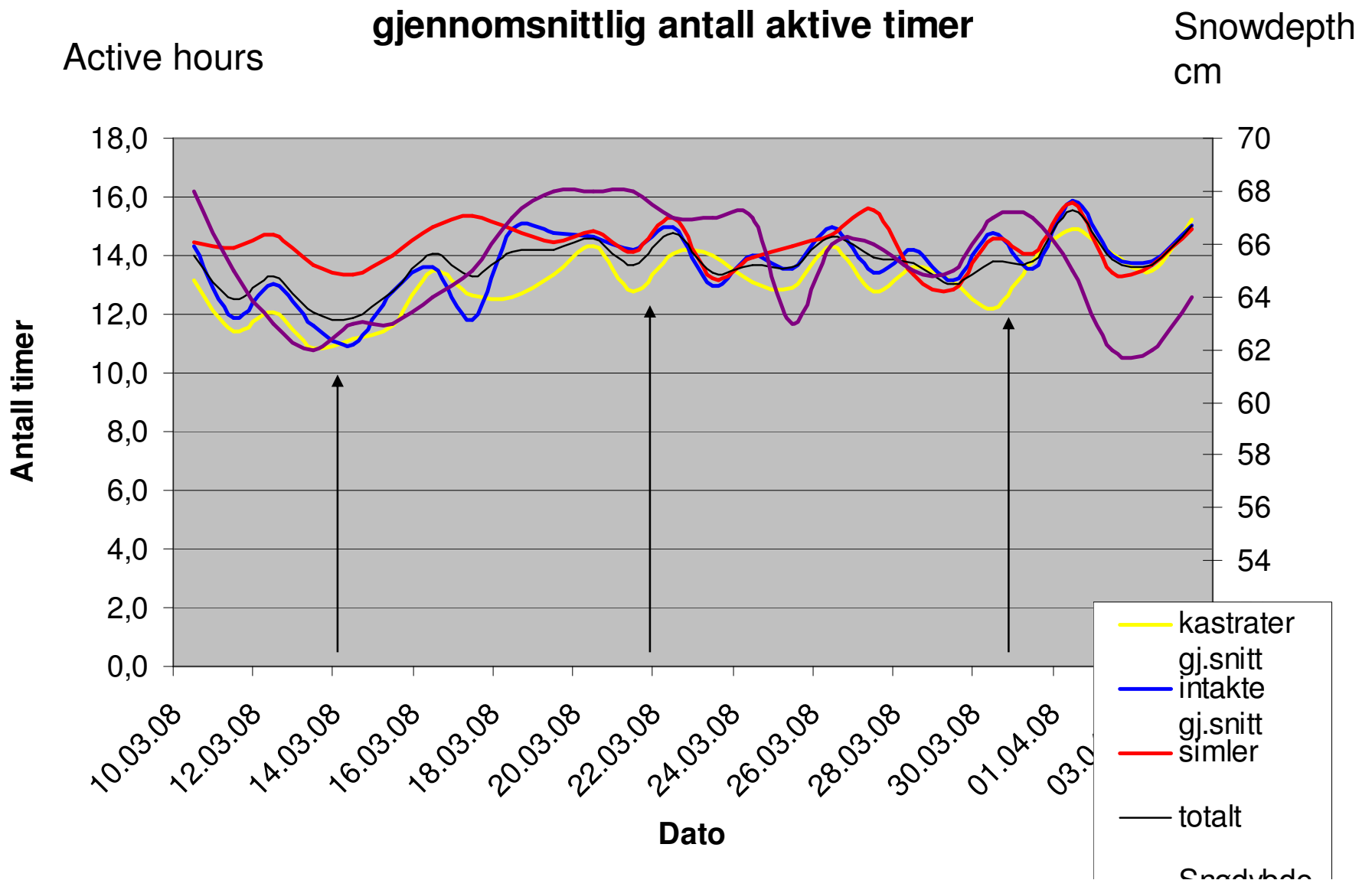
Snowdepth: 63 cm.



Snowdepth and precipitation



Activity and snowdepth



Study objects

